

WHAT IS CLAIMED:

1. An apparatus for centrifuging blood or plasma to separate a component therefrom without degradation of protein contained in the blood or protein, comprising:

a container for holding the blood or plasma during the centrifuging;

5 a means for rotating the container;

a heat-emitting device provided opposite the container for radiating the blood or plasma in the container to increase the temperature of the blood or plasma; and

a filter disposed between the heat-emitting device and the container
10 for filtering the radiation emitted from the heat-emitting device to remove substantially all radiation therefrom having a wavelength in the range of from 190 to 400 nm.

2. The apparatus according to Claim 1, wherein the container comprises a cylindrical member, a piston displaceable therein, a top wall and a tubular piston rod extending through the top wall, the piston rod dividing the cylindrical member into a first chamber located above the piston between the
5 piston and the top wall, and a second chamber positioned below the piston.

3. The apparatus according to Claim 2, further comprising a piston activating mechanism connected to the piston for moving the piston from a first position in the cylindrical member to a second position in the cylindrical member.

4. The apparatus according to Claim 1, wherein the means for rotating the container comprises a supporting turntable with means for releasably retaining the container, and a motor coupled to the supporting turntable, the motor rotating the supporting turntable and the container about
5 a central axis thereof.

5. The apparatus according to Claim 1, wherein the heat-emitting device comprises a first heating source for emitting visible light substantially directed towards the container.

6. The apparatus according to Claim 5, wherein the first heating source is a halogen bulb.

7. The apparatus according to Claim 5, further comprising a second heating source for emitting infrared radiation substantially directed towards the container.

8. The apparatus according to Claim 7, wherein the second heating source comprises a metal heating plate.

9. The apparatus according to Claim 1, further comprising a first temperature sensor for detecting the temperature of air in an area around the container, a second temperature sensor for detecting the temperature of a surface of the container, and a control unit for controlling the heat-emitting
5 device in response to the temperatures detected in the first and second temperature sensors.

10. A method for converting fibrinogen contained in a sample of blood or plasma to fibrin without degrading proteins contained in the sample, comprising the steps of:

heating a sample of blood or plasma to 36 to 37°C with radiation from
5 a heat-emitting device;

filtering the radiation emitted by the heating-emitting device to remove substantially all radiation therefrom having a wavelength in the range of from about 190 to 400 nm; and

subjecting the sample to an enzyme for catalyzing the cleavage of
10 fibrinopeptides A and/or B from fibrinogen contained in the sample of blood or plasma.

11. The method according to Claim 10, further comprising the step of centrifuging the sample of blood or plasma while heating the sample and filtering the radiation.

12. The method according to Claim 11, wherein the centrifuging is conducted at 500 to 2500 RPM.

13. The method according to Claim 12, wherein the centrifuging is conducted at 1000 RPM.

14. The method according to Claim 10, wherein the sample of blood or plasma is heated to about 37°C.

15. The method according to Claim 10, wherein radiation having a wavelength of about 190 to 400 nm is filtered from the radiation emitted by the heat-emitting device.

16. A method for centrifuging blood or plasma to separate a component of the blood or plasma without degradation of protein contained in the blood or plasma, comprising the steps of:

heating the blood or plasma to about 36 to 37 °C with radiation from a heat-emitting device;

filtering the radiation emitted from the heat-emitting device to remove substantially all radiation therefrom having a wavelength in the range of from 190 to 400 nm; and

centrifuging the blood or plasma.

17. The method according to Claim 16, wherein the sample of blood or plasma is heated to about 36°C.

18. The method according to Claim 17, wherein radiation having a wavelength in the range of from about 190 to 400 nm is filtered from the radiation emitted by the heat-emitting device.